ABSTRACT OF THE DISCLOSURE

A packet forwarding apparatus which quickly selects a plurality of control information entries to be applied according to header information of an input packet

5 and concurrently performs various the header processing functions. The packet forwarding apparatus comprises a flow retrieval unit which compares header information of the input packet with plural sets of flow identification conditions and concurrently outputs various flow identifiers appropriate to the input packet, various header processing units corresponding to the flow identifiers, and a packet

10 forwarding control unit for controlling forwarding of input packets according to control information outputted from at least one of the header processing units. While each of the header processing units has an information table containing plural information entries, reads a single information entry from the information table according to the flow identifier outputted from the flow retrieval unit, and executes a

15 prescribed arithmetic operation.